10/540,168

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NEWS 3 DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/ USPAT2

NEWS 4 JAN 13 IPC 8 searching in IFIPAT, IFIUDB, and IFICDB

NEWS 5 JAN 13 New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to INPADOC

NEWS 6 JAN 17 Pre-1988 INPI data added to MARPAT

NEWS 7 JAN 17 IPC 8 in the WPI family of databases including WPIFV

NEWS 8 JAN 30 Saved answer limit increased

NEWS 9 FEB 21 STN AnaVist, Version 1.1, lets you share your STN AnaVist visualization results

NEWS 10 FEB 22 The IPC thesaurus added to additional patent databases on STN

NEWS 11 FEB 22 Updates in EPFULL; IPC 8 enhancements added

NEWS 12 FEB 27 New STN AnaVist pricing effective March 1, 2006

NEWS 13 FEB 28 MEDLINE/LMEDLINE reload improves functionality

NEWS 14 FEB 28 TOXCENTER reloaded with enhancements

NEWS 15 FEB 28 REGISTRY/ZREGISTRY enhanced with more experimental spectral property data

NEWS 16 MAR 01 INSPEC reloaded and enhanced

NEWS 17 MAR 03 Updates in PATDPA; addition of IPC 8 data without attributes

NEWS 18 MAR 08 X.25 communication option no longer available after June 2006

NEWS 19 MAR 22 EMBASE is now updated on a daily basis

NEWS 20 APR 03 New IPC 8 fields and IPC thesaurus added to PATDPAFULL

NEWS 21 APR 03 Bibliographic data updates resume; new IPC 8 fields and IPC thesaurus added in PCTFULL

NEWS 22 APR 04 STN AnaVist \$500 visualization usage credit offered

NEWS 23 APR 12 LINSPEC, learning database for INSPEC, reloaded and enhanced

NEWS 24 APR 12 Improved structure highlighting in FQHIT and QHIT display in MARPAT

NEWS 25 APR 12 Derwent World Patents Index to be reloaded and enhanced during second quarter; strategies may be affected

NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT
http://download.cas.org/express/v8.0-Discover/

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=> FILE REGISTRY

COST IN U.S. DOLLARS

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FULL ESTIMATED COST

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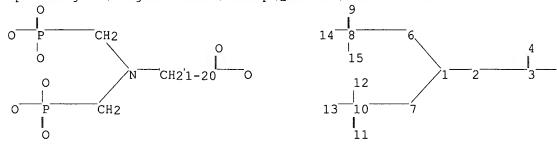
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=>

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chain nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

chain bonds :

1-2 1-6 1-7 2-3 3-4 3-5 6-8 7-10 8-9 8-14 8-15 10-11 10-12 10-13

exact/norm bonds :

3-4 3-5 8-9 8-14 8-15 10-11 10-12 10-13

exact bonds :

1-2 1-6 1-7 2-3 6-8 7-10

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 16:44:53 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 29 TO ITERATE

100.0% PROCESSED 29 ITERATIONS 3 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 257 TO 903 PROJECTED ANSWERS: 3 TO 163

L2 3 SEA SSS SAM L1

=> s ll sss full

FULL SEARCH INITIATED 16:45:00 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 646 TO ITERATE

100.0% PROCESSED 646 ITERATIONS 86 ANSWERS

SEARCH TIME: 00.00.01

L3 86 SEA SSS FUL L1

=> FIL CAPLUS

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

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http://www.cas.org/infopolicy.html

=> s 13

L4 308 L3

=> s l4 and nanoparticle

35087 NANOPARTICLE 58177 NANOPARTICLES

61266 NANOPARTICLE

(NANOPARTICLE OR NANOPARTICLES)

L5 4 L4 AND NANOPARTICLE

=> d l4 ibib abs hitstr tot

THE ESTIMATED COST FOR THIS REQUEST IS 1573.88 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:n REQUEST CANCELED

=> d 15 ibib abs hitstr tot

L5 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:930970 CAPLUS

DOCUMENT NUMBER: 141:376821

TITLE: Core/shell nanoparticles suitable for (f)

ret-assays

INVENTOR(S): Meyer, Christiane; Haase, Markus; Hoheisel, Werner;

Bohmann, Kerstin

PATENT ASSIGNEE(S): Nanosolutions GmbH, Germany; Bayer Technology Services

GmbH

SOURCE: Eur. Pat. Appl., 40 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.					KIND DATE				APPLICATION NO.						DATE		
EP	1473	347			A1	_	2004	1103	1	EP 2	003-	9704			2	0030	430	
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK		
AU	2004	2345	35		A1		2004	1111		AU 2	004-	2345	35		2	0040	429	
CA	CA 2523027				AA	AA 20041111 CA 2004-2523027							20040429					
WO	WO 2004096944				A1 20041111				WO 2004-EP4574						20040429			
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	ΑM,	
		AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	ΙT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	
		SN,	TD,	TG														
PRIORITY	APP	LN.	INFO	.:					1	EP 2	003-	9704		i	A 2	0030	430	

WO 2004-EP4574 W 20040429

The present invention relates to luminescent inorg. nanoparticles comprising (a) a core made from a first metal salt or oxide being surrounded by (b) a shell made from a second metal salt or oxide being luminescent and having non-semiconductor properties. These particles can be advantageously used in (fluorescence) resonance energy transfer ((F)RET)-based bioassays in view of their higher (F)RET efficiency.

IT 55628-97-2 524934-34-7

RL: ARU (Analytical role, unclassified); ANST (Analytical study) (Core/shell nanoparticles suitable for FRET-assays)

RN 55628-97-2 CAPLUS

CN Hexanoic acid, 6-[bis(phosphonomethyl)amino]- (9CI) (CA INDEX NAME)

```
CH<sub>2</sub>-PO<sub>3</sub>H<sub>2</sub>
|
|
| H<sub>2</sub>O<sub>3</sub>P-CH<sub>2</sub>-N-(CH<sub>2</sub>)<sub>5</sub>-CO<sub>2</sub>H
```

RN 524934-34-7 CAPLUS

CN Undecanoic acid, 11-[bis(phosphonomethyl)amino]- (9CI) (CA INDEX NAME)

CH2-PO3H2 | H2O3P-CH2-N-(CH2)10-CO2H

L5 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:525918 CAPLUS

DOCUMENT NUMBER: 141:94785

TITLE: Production and use of nanoparticles with

in-situ-modified surface using multifunctional

modifiers

INVENTOR(S): Koehler, Burkard; Bohmann, Kerstin; Hoheisel, Werner;

Haase, Markus; Haubold, Stefan; Meyer, Christiane;

Heidelberg, Thorsten

PATENT ASSIGNEE(S):

SOURCE:

Bayer Ag, Germany Ger. Offen., 14 pp.

CODEN: GWXXBX

Patent

German

DOCUMENT TYPE:

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.					KIND DATE		APPLICATION NO.						DATE					
•	DE 10259935 WO 2004058914							DE 2002-10259935											
	WO	2004	0569	⊥4		ΑI		2004	0/13	WO 2003-EP13816						20031206			
		W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	
			ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	
			TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
		RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
			BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
			ES,	FI,	FR,	GB,	GR,	ΗU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
			TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG
	ΑU	2003	2922	01		A1		2004	0722	AU 2003-292201					20031206				
	ΕP	1578	888			A1		2005	0928	1	EP 2	003-	7677	59		2	0031	206	
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK		
	US	2006	0631	55		A1		2006	0323	I	US 2	005-	5401	68		2	0050	829	
PRIO	RITY	APP	LN.	INFO	.:				1	DE 2002-10259935				i	A 20021220				
									1	WO 2	003-	EP13	316	1	W 2	0031	206		

OTHER SOURCE(S): MARPAT 141:94785

The present invention concerns procedures for the synthesis of nanoparticles, especially metal salt nanoparticles, and in particular the chemical modification their surfaces to attach functional groups providing properties required for future use. According to the invention the addition of a modifying agent to the synthesis mixture leads to attachment of a 1st functional group to the nanoparticle surface which is then bonded to specifically selected mols. carrying a 2nd functional group. Thus a post synthetic, sep. use-specific modification step is unnecessary. Advantageously addition of a 3rd functional group is possible. A new substance class, the imino-bis(methylenephosphono)carboxy lic acid pentaalkyl esters, are particularly suitable as modifying agents. These modifying agents permit the growth of the nanoparticles with controlled and simultaneous modification of the surface during synthesis (in situ) in such a way that the particles are very soluble in a multiplicity of solvents, and can be used for coupling of mols. with functional groups, e.g., antibodies; the particles possess an all around usefulness.

IT 55628-97-2P 524934-34-7P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(modifier preparation intermediate; production and use of nanoparticles with in-situ-modified surface using multifunctional modifiers)

RN 55628-97-2 CAPLUS

CN

Hexanoic acid, 6-[bis(phosphonomethyl)amino]- (9CI) (CA INDEX NAME)

$$_{\rm H_{2}O_{3}P-CH_{2}-N-(CH_{2})_{5}-CO_{2}H}^{\rm CH_{2}-PO_{3}H_{2}}$$

RN 524934-34-7 CAPLUS

CN Undecanoic acid, 11-[bis(phosphonomethyl)amino]- (9CI) (CA INDEX NAME)

IT 711029-60-6P 711029-61-7P 714231-05-7P

RL: CPS (Chemical process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process) (surface modifier; production and use of nanoparticles with in-situ-modified surface using multifunctional modifiers)

RN 711029-60-6 CAPLUS

$$\begin{array}{c|c} & \text{OEt} \\ & | \\ \text{CH}_2 - \text{P-OEt} \\ & | \\ \text{OEt} & | & \text{O} \\ & | & \text{O} \\ | & | & \text{O} \\ \text{EtO-P-CH}_2 - \text{N-(CH}_2)_{10} - \text{C-OEt} \\ | & | & \text{O} \\ \end{array}$$

RN 711029-61-7 CAPLUS

RN 714231-05-7 CAPLUS

L5 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:376763 CAPLUS

DOCUMENT NUMBER:

138:381687

TITLE:

Resonance energy transfer assays based on luminescent

inorganic doped nanoparticles

INVENTOR(S):

Bohmann, Kerstin; Hoheisel, Werner; Koehler, Burkhard;

Dorn, Ingmar

PATENT ASSIGNEE(S):

Bayer Aktiengesellschaft, Germany

SOURCE:

PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'						KIND DATE				APPLICATION NO.						DATE		
	WO 2003040024 WO 2003040024			A2 20030515			,				20021104							
	W:	CO, GM, LS, PL,	CR, HR, LT, PT,	CU, HU, LU, RO,	CZ, ID, LV, RU,	DE, IL, MA, SD,	DK, IN, MD, SE,	AZ, DM, IS, MG, SG,	DZ, JP, MK, SI,	EC, KE, MN, SK,	EE, KG, MW, SL,	ES, KP, MX,	FI, KR, MZ,	GB, KZ, NO,	GD, LC, NZ,	GE, LK, OM,	GH, LR, PH,	
		GH, KG, FI, CG,	GM, KZ, FR, CI,	KE, MD, GB, CM,	LS, RU, GR, GA,	MW, TJ, IE, GN,	MZ, TM, IT, GQ,	YU, SD, AT, LU, GW,	SL, BE, MC, ML,	SZ, BG, NL, MR,	TZ, CH, PT, NE,	CY, SE, SN,	CZ, SK, TD,	DE, TR, TG	DK, BF,	EE, BJ,	ES, CF,	
CA	DE 10153829 A1 200305 CA 2465646 AA 200305 EP 1444517 A2 200408						0515	CA 2002-2465646						20021104				
JР		IE,	SI,	LT,	LV,	FI,	RO,	FR, MK, 0324	CY,	AL,	TR,	BG,	CZ,	EE,	SK	·	,	
PRIORIT	JP 2005508012 T2 20050324 JP 2003-542078 20021104 US 2005064604 A1 20050324 US 2004-494390 20040430 PRIORITY APPLN. INFO.: DE 2001-10153829 A 20011105 WO 2002-EP12256 W 20021104 AB The invention relates to an assay based on resonance energy transfer																	

The invention relates to an assay based on resonance energy transfer (RET), comprising a 1st mol. group A, which is marked with ≥1 energy donor, and ≥1 2nd mol. group B which is marked with ≥1 energy acceptor, the donor comprising a mol. or particle which can be energetically excited by an external radiation source and which is fluorescence enabled and the acceptor comprising a mol. or particle which can be excited by energy transfer via the donor with partial or complete quenching of the donor fluorescence, and the donor and/or acceptor comprise luminescing inorg. doped nanoparticles having an expansion of ≤ 50 nm, emitting electromagnetic radiation with stokes or anti-stokes scattering after energetic excitation. Thus LaPO4:Ce.Tb nanoparticles were synthesized; the hanoparticles were treated with ethylene glycol and sulfuric acid at 210 °C in inert gas atmospheric for 3 h. The particles were dissolved

at ca. 135°C; ethylene glycol was partially evaporated and the solution was dialyzed over night against water. The surface treated nanoparticles underwent oxidation with potassium permanganate in the presence of sulfuric acid for carboxy functionalization. 524934-34-7

RL: RCT (Reactant); RACT (Reactant or reagent)

(resonance energy transfer assays based on luminescent inorg. doped nanoparticles)

RN 524934-34-7 CAPLUS

TT

CN Undecanoic acid, 11-[bis(phosphonomethyl)amino]- (9CI) (CA INDEX NAME)

CH2-PO3H2 | H2O3P-CH2-N-(CH2)10-CO2H

IT 524934-34-7DP, conjugate with bromotrimethyl silane-treated LaPO4:Ce, Tb nanoparticles, and binding to biotin, oligonucleotide or antibody

RL: ARG (Analytical reagent use); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(spacer; resonance energy transfer assays based on luminescent inorg. doped nanoparticles)

RN 524934-34-7 CAPLUS

CN Undecanoic acid, 11-[bis(phosphonomethyl)amino]- (9CI) (CA INDEX NAME)

L5 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:335397 CAPLUS

DOCUMENT NUMBER: 135:200299

TITLE: Nonpolymeric Coatings of Iron Oxide Colloids for

Biological Use as Magnetic Resonance Imaging Contrast

Agents

AUTHOR(S): Portet, David; Denizot, Benoit; Rump, Elmar; Lejeune,

Jean-Jacques; Jallet, Pierre

CORPORATE SOURCE: UPRES-EA 2169 "Vectorisation Particulaire", Faculty of

Medicine, Pavillon Ollivier, University of Angers,

Angers, F 49045, Fr.

SOURCE: Journal of Colloid and Interface Science (2001),

238(1), 37-42

CODEN: JCISA5; ISSN: 0021-9797

PUBLISHER: Academic Press

DOCUMENT TYPE: Journal LANGUAGE: English

AB Iron oxide nanoparticles are used in vivo as contrast agents in magnetic resonance imaging. Their widely used polymer coatings are directly involved in their biocompatibility and avoid magnetic aggregation. As these polymer brushes also limit their tissue diffusion due to important hydrodynamic sizes, this work looks to obtain particles coated with thin layers of organic biocompatible mols. Coating mols. were chosen depending on their fixation site on iron cores; carboxylates, sulfonates, phosphates, and phosphonates, and, among them, analogs of the phosphorylcholine. Two coating procedures (dialysis and exchange resins purification) were evaluated for hydrodynamic size, total iron concentration, electrophoretic mobility, and colloidal stability. Furthermore, a complementary test on stainless steel plates evaluated the contamination by competition of phosphonates as a rough estimation of the biocompatibility of

the particles. Coating with bisphosphonates, the more interesting fixation moiety, leads to small (less than 15 nm) and stable objects in a wide range of pH including the neutrality. From stability data, the coating d. was evaluated at around 1.6 mols. per nm2. Including a quaternary ammonium salt to the coating mol. lowers their electrophoretic mobility. Moreover, this type of coating protects steel plates against contamination without significant desorption. All these properties allow further developments of these nanoparticles for biomedical applications. (c) 2001 Academic Press.

IT 2439-99-8, N, N-Bis (phosphonomethyl) glycine

RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(nonpolymeric coatings for iron oxide colloids used as MRI contrast agents)

RN 2439-99-8 CAPLUS

CN Glycine, N, N-bis(phosphonomethyl) - (7CI, 8CI, 9CI) (CA INDEX NAME)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s nanoparticle and (caproate or undecanoate)

35087 NANOPARTICLE

58177 NANOPARTICLES

61266 NANOPARTICLE

(NANOPARTICLE OR NANOPARTICLES)

3485 CAPROATE

135 CAPROATES

3572 CAPROATE

(CAPROATE OR CAPROATES)

979 UNDECANOATE

30 UNDECANOATES

1001 UNDECANOATE

(UNDECANOATE OR UNDECANOATES)

L6 10 NANOPARTICLE AND (CAPROATE OR UNDECANOATE)

=> s 16 not 15

10 L6 NOT L5

=> d 17 ibib abs hitstr tot

L7 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2005:737508 CAPLUS

TITLE:

Electrochemical and bioelectrochemical reactions gated

by hydrophobic magnetic nanoparticles

AUTHOR(S):

Katz, Eugenii

CORPORATE SOURCE:

Institute of Chemistry, The Hebrew University of

Jerusalem, Jerusalem, 91904, Israel

SOURCE:

Abstracts of Papers, 230th ACS National Meeting, Washington, DC, United States, Aug. 28-Sept. 1, 2005

(2005), COLL-032. American Chemical Society:

Washington, D. C. CODEN: 69HFCL

DOCUMENT TYPE:

Conference; Meeting Abstract; (computer optical disk)

LANGUAGE: English

AB Magnetic nanoparticles consisting of undecanoate

-capped magnetite were used to control and switch the hydrophobic or hydrophilic properties of the electrode surface. The magnetic attraction

of the functionalized nanoparticles to the electrode surface by means of an external magnet yields a hydrophobic interface that acts as insulating layer prohibiting interfacial electron transfer. The retraction of the magnetic nanoparticles from the electrode to the upper toluene phase by means of the external magnet generates a hydrophilic electrode that reveals effective interfacial electron transfer. This was used to switch reversibly bioelectrocatalytic reactions. The hydrophobic magnetic nanoparticles were also used to control biorecognition and biocatalytic processes on biomaterial-functionalized interfaces, such as DNA hybridization, polymerization

and scission.

L7 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:588711 CAPLUS

DOCUMENT NUMBER: 143:103260

TITLE: Nanoparticle compositions of counter-ion complexes of drugs for oral administration

INVENTOR(S): Pai, Chaul-Min; Min, Mi-Hong; Hwang, Jun-Seok; Cho,

Kyung-Mi

PATENT ASSIGNEE(S): Samyang Corporation, S. Korea

SOURCE: PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIND		DATE			APPLICATION NO.					DATE		
WO	WO 2005061004				A1 20050707			WO 2004-KR3448						20041224			
	W:	AE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	ΚZ,	LC,	LK,
		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	NO,
		NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw	
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	ŪG,	ZM,	ZW,	AM,
		AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,
					TD,												

PRIORITY APPLN. INFO.: KR 2003-96641 A 20031224

AB The present invention relates to an orally administrable composition containing nanoparticles with the particle size of 500 nm or less, comprising 0.130 weight% of a complex of a water-soluble drug and a counter-ion substance in which the charged water-soluble drug is bonded with the counter-ion substance, 0.5-80 weight% of a lipid, 0.5-80 weight% of a polymer, and 1-80 weight%

of an emulsifier, wherein the weight ratio of said lipid and said polymer is in the range of 1:0.053, and a preparation method thereof. The composition of the

present invention has high gastrointestinal absorption rate upon oral administration, and has high drug entrapping rate in the nanoparticle, and is also stable against lipases. For example, oral nanoparticles contained insulin-sodium docusate complex 15, monoolein 60, chitosan 20, Poloxamer 407 200 mg, and small amount of citric acid.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:472002 CAPLUS

DOCUMENT NUMBER: 143:13359

TITLE: Nanoparticle compositions comprising

antibodies for targeted delivery Liversidge, Elaine; Cunningham, James

Elan Pharma International Ltd., Ire.

PCT Int. Appl., 95 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

INVENTOR(S):

SOURCE:

Patent English

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

DATE APPLICATION NO. DATE PATENT NO. KIND WO 2005049091 A2 2005 A2 20050602 WO 2004-US37246 20041109 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20050707

US 2005147664 A1 20050707 US 2004-979792 20041103 PRIORITY APPLN. INFO.: US 2003-519251P P 20031113

B The present invention is directed to compns. of one or more nanoparticulate active agents, at least one PEG-derivatized surface stabilizer, and at least one antibody or fragment thereof, and methods of using such compns. for targeting delivery of the one or more active agents to a desired site. The one or more active agents preferably have a particle size of $\leq 2~\mu$. The targeted delivery can be used, e.g., for disease diagnosis, imaging, or drug delivery. Thud, WIN-68209 particles wee stabilized by PEG-DSPE stabilizer.

L7 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:168785 CAPLUS

DOCUMENT NUMBER: 142:388499

TITLE: Magnetoswitchable electrochemistry gated by

alkyl-chain-functionalized magnetic

nanoparticles: Control of diffusional and

surface-confined electrochemical processes
AUTHOR(S): Katz, Eugenii; Baron, Ronan; Willner, Itamar
CORPORATE SOURCE: Institute of Chemistry, The Hebrew University of

Jerusalem, Jerusalem, 91940, Israel

SOURCE: Journal of the American Chemical Society (2005),

127(11), 4060-4070

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB Magnetic nanoparticles consisting of undecanoate

-capped magnetite (average diameter .apprx.5 nm) are used to selectively gate diffusional and surface-confined electrochem. reactions. A two-phase system consisting of an aqueous buffer solution and a toluene phase that includes

the suspended undecanoate-capped magnetic nanoparticles is used to control the interfacial properties of the electrode surface. Two different phenomena are controlled by attraction of the magnetic nanoparticles to the electrode by means of an external magnet: (i) The attracted magnetic nanoparticles form a hydrophobic layer on the electrode surface resulting in the blocking of diffusional electrochem. processes, while retaining the redox functions of surface-confined electrochem. units. (ii) For certain surface-immobilized redox species (e.g., quinones), the attraction of the magnetic

nanoparticles to the electrode surface alters the mechanism of the process from an aqueous-type electrochem. to a dry organic-phase-type electrochem. Also, bioelectrocatalytic and electrocatalytic transformations at the electrode are controlled by means of attraction of the magnetic nanoparticles to the electrode surface. Controlling the catalytic functions of the modified electrode by means of the magnetic nanoparticles attracted to the electrode is exemplified in two different directions: (i) Blocking of the bioelectrocatalyzed oxidation of glucose by glucose oxidase (GOx) using a surface-confined ferrocene monolayer as electron-transfer mediator. (ii) Activation of the microperoxidase-11 electrocatalyzed reduction of cumene hydroperoxide. In the latter system, the hydrophobic magnetic nanoparticles adsorb toluene, and the hydrophobic matrix acts as a carrier for cumene hydroperoxide to the electrode surface modified with the microperoxidase-11 catalyst.

REFERENCE COUNT: 86 THERE ARE 86 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

2005:15791 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 142:120462

TITLE: Therapeutic and diagnostic conjugates for use with

multispecific antibodies

INVENTOR(S): Mcbride, William J.; Goldenberg, David M.; Noren,

Carl; Hansen, Hans J.

PATENT ASSIGNEE(S): Immunomedics, Inc., USA

U.S. Pat. Appl. Publ., 53 pp., Cont.-in-part of U.S. SOURCE:

Ser. No. 150,654.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 16

PATENT INFORMATION:

	NO.	KIND	DATE	APPLICATION NO.				
US 2005	A1 A1 B2	20050106 20020117 20051108		20040211				
	3198595		20031023	US 2002-150654 WO 2005-US4177				
	CN, CO, C GE, GH, G LK, LR, I NO, NZ, C TJ, TM, T BW, GH, G AZ, BY, K EE, ES, E RO, SE, S	R, CU, C M, HR, HI S, LT, LI M, PG, PI N, TR, T' M, KE, L G, KZ, MI I, FR, GI I, SK, TI	Z, DE, DK, U, ID, IL, U, LV, MA, H, PL, PT, T, TZ, UA, S, MW, MZ, D, RU, TJ, B, GR, HU, R, BF, BJ,	BA, BB, BG, BR, BW, DM, DZ, EC, EE, EG, IN, IS, JP, KE, KG, MD, MG, MK, MN, MW, RO, RU, SC, SD, SE, UG, US, UZ, VC, VN, NA, SD, SL, SZ, TZ, TM, AT, BE, BG, CH, IE, IS, IT, LT, LU, CF, CG, CI, CM, GA,	ES, FI, GB, GD, KP, KR, KZ, LC, MX, MZ, NA, NI, SG, SK, SL, SY, YU, ZA, ZM, ZW UG, ZM, ZW, AM, CY, CZ, DE, DK, MC, NL, PL, PT,			
PRIORITY APPORT				US 1998-90142P US 1998-104156P US 1999-337756 US 1999-382186 US 2001-823746 US 2002-150654 US 2004-776470	P 19981014 A2 19990622 B2 19990823 A2 20010403 A2 20020517			

AB Disclosed are compds. that include two or more haptens conjugated by a spacer or a carrier. The haptens may include diethylenetriaminepentaacetate (DTPA), histamine-succinyl-glutamine (HSG), or combinations of DTPA and HSG. The compds. also includes an effector mol. which may be conjugated to one or more of the haptens, the

spacer/carrier, or both. The effector mol. may be conjugated by a number of linkages including an ester linkage, an imino linkage, an amino linkage, a sulfide linkage, a thiosemicarbazone linkage, a semicarbazone linkage, an oxime linkage, an ether linkage, or combinations of these linkages. Also disclosed are methods of synthesizing the compds. and/or precursors of the compds.

ANSWER 6 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

2004:934160 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 141:388650

Anti-CD74 immunoconjugates and their therapeutic and TITLE:

diagnostic uses

Griffiths, Gary L.; Hansen, Hans J.; Goldenberg, David INVENTOR(S):

M.; Lundberg, Bo B.

PATENT ASSIGNEE(S): Immunomedics, Inc., USA

U.S. Pat. Appl. Publ., 44 pp., Cont.-in-part of U.S. SOURCE:

> Ser. No. 377,122. CODEN: USXXCO

DOCUMENT TYPE: Patent

English LANGUAGE:

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE		
US 2004219203 US 6306393 US 2002071807 US 2003124058 US 2003133930 US 2004115193 AU 2004247270 CA 2529496 WO 2004110390 WO 2004110390	A1 20041104 B1 20011023 A1 20020613 A1 20030703 A1 20030717 A1 20040617 A1 20041223 AA 20041223 A2 20041223 A3 20050428	US 1999-307816 US 2001-965796 US 2002-314330 US 2003-350096 US 2003-377122 AU 2004-247270 CA 2004-2529496 WO 2004-US19238	20031112 19990510 20011001 20021209 20030124 20030303 20040617 20040617		
W: AE, AG, AL, CN, CO, CR, GE, GH, GM, LK, LR, LS, NO, NZ, OM, TJ, TM, TN, RW: BW, GH, GM, AZ, BY, KG, EE, ES, FI, SI, SK, TR, SN, TD, TG	AM, AT, AU, AZ, CU, CZ, DE, DK, HR, HU, ID, IL, LT, LU, LV, MA, PG, PH, PL, PT, TR, TT, TZ, UA, KE, LS, MW, MZ, KZ, MD, RU, TJ, FR, GB, GR, HU, BF, BJ, CF, CG,	BA, BB, BG, BR, BW, BY, DM, DZ, EC, EE, EG, ES, IN, IS, JP, KE, KG, KP, MD, MG, MK, MN, MW, MX, RO, RU, SC, SD, SE, SG, UG, US, UZ, VC, VN, YU, NA, SD, SL, SZ, TZ, UG, TM, AT, BE, BG, CH, CY, IE, IT, LU, MC, NL, PL, CI, CM, GA, GN, GQ, GW,	FI, GB, GD, KR, KZ, LC, MZ, NA, NI, SK, SL, SY, ZA, ZM, ZW ZM, ZW, AM, CZ, DE, DK, PT, RO, SE, ML, MR, NE,		
IE, SI, FI,	RO, CY, TR, BG, A1 20050901	GB, GR, IT, LI, LU, NL, CZ, EE, HU, PL, SK US 2005-104594 US 2005-222838 US 1999-307816 US 2000-590284 US 2001-965796 US 2002-360259P US 2002-314330 US 2003-350096 US 2003-377122 US 2003-478830P US 1997-41506P US 1998-38995 US 1999-138284P US 2003-706852			
AB Disclosed are compni	s. that include a	anti-CD74 immunoconjugate			

therapeutic and/or diagnostic agent. Also disclosed are methods for preparing the immunoconjugates and using the immunoconjugates in diagnostic and therapeutic procedures. The compns. may be part of a kit for administering the anti-CD74 immunoconjugates compns. in therapeutic and/or diagnostic methods. Anti-CD74 binding mols. are conjugated to the one or more lipids by one or more of a sulfide linkage, a hydrazone linkage, a hydrazine linkage, an ester linkage, an amido linkage, an amino linkage, an imino linkage, a thiosemicarbazone linkage, a semicarbazone linkage, an oxime linkage, a carbon-carbon linkage. Anti-CD74 immunoconjugates comprise a drug, a prodrug, a toxin, an enzyme, a radioisotope, an immunomodulator, a cytokine, a hormone, an antibody., an oligonucleotide, or a photodynamic agent.

ANSWER 7 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

2004:790239 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 141:402333

TITLE: Magnetoswitchable Controlled

> Hydrophilicity/Hydrophobicity of Electrode Surfaces Using Alkyl-Chain-Functionalized Magnetic Particles:

Application for Switchable Electrochemistry Katz, Eugenii; Sheeney-Haj-Ichia, Laila; Basnar,

Bernhard; Felner, Israel; Willner, Itamar

CORPORATE SOURCE: Institute of Chemistry and Racah Institute of Physics,

The Hebrew University of Jerusalem, Jerusalem, 91940,

Israel

Langmuir (2004), 20(22), 9714-9719 SOURCE:

CODEN: LANGD5; ISSN: 0743-7463

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AUTHOR(S):

Magnetic nanoparticles consisting of undecanoate

-capped magnetite (average diameter .apprx.4.5 nm; saturated magnetization, Ms, 38.5

emu g-1) are used to control and switch the hydrophobic or hydrophilic properties of the electrode surface. A 2-phase system consisting of an aqueous buffer solution and a toluene phase that includes the suspended capped magnetic nanoparticles is used to control the interfacial properties of the electrode surface. The magnetic attraction of the functionalized particles to the electrode by an external magnet yields a hydrophobic interface that acts as an insulating layer, prohibiting interfacial electron transfer. The retraction of the magnetic particles from the electrode to the upper toluene phase by the external magnet generates a hydrophilic electrode that reveals effective interfacial electron transfer. The electron-transfer resistance and double-layer capacitance of the electrode surface upon the attraction and retraction of the functionalized magnetic particles to and from the electrode, resp., by the external magnet were probed by Faradaic impedance spectroscopy (Ret = 170 Ω and Cdl = 40 μF cm-2 in the hydrophilic state of the electrode and Ret = 22 k Ω and Cdl = 0.5 μF cm-2 in the hydrophobic state of the interface). The magnetoswitchable control of the interface enables magnetic switching of the bioelectrocatalytic oxidation of glucose in the presence of glucose oxidase and ferrocene dicarboxylic acid to ON and OFF states.

REFERENCE COUNT: THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 8 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:691043 CAPLUS

DOCUMENT NUMBER: 142:411718

TITLE: Nonionic nanoparticles from miniemulsion

polymerization of vinyl acetate with ϵ -caprolactone or Miglyol as hydrophobes -

Application in encapsulation agents

Rajot, Isabelle; Bone, Stephane; Bathfield, Mael; AUTHOR(S):

Graillat, Christian; Hamaide, Thierry; Iojoiu,

Cristina; Racles, Carmenus

CORPORATE SOURCE: Laboratoire de Chimie et Procedes de Polymerisation,

CNRS-CPE Villeurbanne, Villeurbanne, 69616, Fr.

SOURCE: Buletinul Stiintific al Universitatii "Politehnica"

din Timisoara Romania, Seria Chimie si Mediului

(2003), 48(1-2), 131-134 CODEN: BSIMFG; ISSN: 1224-6018

PUBLISHER: Universitatii "Politehnica" din Timisoara

DOCUMENT TYPE: Journal LANGUAGE: French

AB Polymerization of vinyl acetate in a miniemulsion containing active components

in the

presence of hydrophobic compds. can give directly encapsulant nanoparticles containing active components alone or as solution in the hydrophobic compds. Biocompatible hydrophobic compds. are oils such as Miglyol or benzyl benzoate, or caprolactone macromer prepared by the

coordinated anionic polymerization in the presence of a suitable transfer agent can solubilize hydrophobic active components. The mol. weight of polyvinyl acetate can be controlled by the use of transfer agent. The encapsulation

is useful for active components such as indomethacine or Vitamin E.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:597624 CAPLUS

DOCUMENT NUMBER: 139:323086

TITLE: Surface-functionalized nano-beads as novel supports

for organic synthesis

AUTHOR(S): Cammidge, Andrew N.; Downing, Stuart; Ngaini, Zainab CORPORATE SOURCE: School of Chemical Sciences and Pharmacy, Wolfson

Materials and Catalysis Centre, University of East

Anglia, Norwich, NR4 7TJ, UK

SOURCE: Tetrahedron Letters (2003), 44(35), 6633-6634

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:323086

AB A novel polymer support has been prepared in which functional link points are located on the surface of polymer nano-beads; the use of the support

has been demonstrated in the syntheses of unsym. porphyrins.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:770219 CAPLUS

DOCUMENT NUMBER: 134:48502

TITLE: Photoelectrochemistry with Integrated Photosensitizer-Electron Acceptor and Au-

Non-on-tiple Tempera

Nanoparticle Arrays

AUTHOR(S): Lahav, Michal; Heleg-Shabtai, Vered; Wasserman,

Julian; Katz, Eugenii; Willner, Itamar; Duerr, Heinz;

Hu, Yi-Zhen; Bossmann, Stefan H.

CORPORATE SOURCE: Institute of Chemistry and The Farkas Center for

Light-Induced Processes, The Hebrew University of

Jerusalem, Jerusalem, 91904, Israel

SOURCE: Journal of the American Chemical Society (2000),

122(46), 11480-11487

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB Photosensitizer/electron acceptor mol. cross-linked Au-

nanoparticle arrays are assembled on indium-doped tin oxide (ITO)

electrodes by a layer-by-layer deposition process. A Ru(II)-tris-(2,2'-

Zn(II)-protoporphyrin IX-bis(N-methyl-N'-undecanoate -4,4'-bipyridinium) (2) are used as mol. cross-linkers for the generation of Au-nanoparticle (13 ± 1 nm) arrays of a controlled number of layers. The Au-nanoparticle arrays are characterized by absorbance spectroscopy and by electrochem. means. The electrodes functionalized with 1- or 2-cross-linked Au-nanoparticle arrays are used in photoelectrochem. expts. The resulting action spectra of the photocurrents follow the absorbance spectra of the resp. chromophores. Mechanistic studies indicate that the photocurrents originate from intramol. electron-transfer quenching of the photoexcited state of the photosensitizer by the electron acceptor units, leading to the formation of intermediate redox species. The oxidized photoproduct oxidizes the sacrificial electron donor, Na2EDTA, whereas the reduced bipyridinium radical cations transfer the electrons to the bulk electrode support. REFERENCE COUNT: THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS 44 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

bipyridine)-cyclobis(paraquat-p-phenylene) catenane (1) or

=> log y		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	62.08	229.23
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-10.50	-10.50

STN INTERNATIONAL LOGOFF AT 16:53:30 ON 04 MAY 2006